

**REMARKS/ARGUMENTS**

In the Office action dated October 18, 2005, claims 1-39 were rejected. In this Amendment and Response, claims 1, 6-9, 12, 14, 18, 20, 25, 27 and 28 are amended, claims 26 and 29-39 are canceled, and claims 40-51 are added. Upon entry of this Amendment, claims 1-25, 27, 28, and 40-51 are pending and at issue in the present application.

The undersigned thanks the examiner for the courtesies extended during a telephonic interview conducted on January 11, 2005. The amendments and remarks contained herein summarize and supplement the substance of that interview.

Support for amendments to claims 1, 9, 14, 20, and 29 may be found at least at paragraphs [0032] and [0044] and at FIGS. 4 and 5 of the specification. Support for amendments to claim 25 may be found at least at paragraphs [0032], [0041], and FIGS. 4, and 5 of the specification. Amendments to claims 27 and 28 have been made only to provide proper dependency on claim 25. Amendments to the preambles of claims 6-8, 12, and 18 have been made solely for consistency and do not affect the scope of the claims. Support for new claim 40 may be found at least at paragraphs [0016], [0032], [0045], and FIGS. 4 and 5 of the specification. Support for new claim 41 may be found at least at paragraph [0042] and original claim 28 of the specification. Support for new claim 42 may be found at least at paragraphs [0016] and [0032] of the specification. Support for new claims 43, 47, 50, and 51 may be found at least at paragraph [0027] of the specification. Support for new claim 44 may be found at least at paragraph [0033] of the specification. Support for new claims 45 and 46 may be found at least at paragraphs [0044] of the specification. Support for new claims 48 and 49 may be found at least at paragraph [0028]. Applicant respectfully submits that no new matter has been added by way of these amendments or new claims.

Applicant traverses the rejection of claims 1, 2, 7, and 9 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,842,850, to Pappas. Applicant further traverses the rejection of claims 8 and 13 under 35 U.S.C. §103(a) as obvious over Pappas. Applicant also traverses the rejection of claims 3-6, 10-25, 27, and 28 as obvious over Pappas and various combinations of Lee, U.S. Patent No. 3,910,753, Gross, U.S. Patent No. 3,730,674, and Oesterle et al., U.S. Patent No. 2,713,256.

Claim 1 recites a candle comprising a meltable solid fuel element, a melting plate upon which the fuel element rests, and a raised capillary lobe located on the melting plate. The capillary lobe cooperatively engages a base portion of a wick holder to form a gap between the capillary lobe and the base portion capable of causing a capillary flow of melted fuel to rise from the melting plate to a wick retained by the wick holder.

Claim 9 recites a candle comprising a meltable solid fuel, a support plate upon which the fuel rests, a wick holder comprising a wick, and a raised capillary lobe located on the support plate. The capillary lobe cooperatively engages a base portion of the wick holder to form a capillary gap therebetween capable of causing a capillary flow of melted fuel from the support plate to the wick. Further, the wick holder conducts heat from a flame upon said wick to said capillary lobe and said support plate, and the wick holder engages the meltable solid fuel.

Claim 14 recites a candle comprising a heat conductive surface shaped to hold and melt a solid fuel material included in a solid fuel element. The fuel element includes a wick holder including a wick and heat fins. The surface is shaped so as to form a pool of liquid fuel. The surface includes a raised capillary lobe, which cooperatively engages the wick holder to form a gap between the capillary lobe and the wick holder through which melted fuel may flow from the melting plate to the wick. The heat fins are configured so as to come in close proximity to a flame on the wick so as to conduct heat from the flame to the surface. In addition, the surface is shaped so as to cause the pool of liquid fuel to flow toward the wick.

Claim 20 recites a replaceable fuel element for a melting plate candle. The fuel element includes a solid fuel material cooperatively engaging a wick holder. The wick holder includes a wick and is configured so as to cooperatively engage a raised capillary lobe on a melting plate to form a gap between the wick holder and the capillary lobe through which melted fuel may flow by capillary action from the melting plate to the wick.

Claim 25 recites a wick holder comprising means to engage a wick, and a base portion configured so as to cooperatively engage a raised capillary lobe upon a candle support plate in such a manner as to permit capillary flow of melted fuel from the support plate to the wick. The wick is engaged in such a manner as to terminate a lower end of the wick at a point at least about 0.25 inches above the support plate.

Claim 40 recites a candle including a support plate for holding a solid fuel element having a raised lobe protruding upwardly therefrom and a solid fuel element. The solid fuel element includes a wick holder and a wick. The wick holder includes a base portion that conforms to the lobe in such a manner as to form a capillary gap therebetween such that melted fuel may rise through the capillary gap from the support plate to the wick by capillary action.

The cited art does not disclose or suggest a candle as recited in claim 1, and claims 2-8 dependent thereon, wherein the capillary lobe cooperatively engages a base portion of a wick holder to form a gap between the capillary lobe and the base portion capable of causing a capillary flow of melted fuel to rise from the melting plate to a wick retained by the wick holder. Therefore, claims 1-8 are in position for allowance, notice of which is respectfully requested.

Further, the cited art does not disclose or suggest a candle as recited in claim 9, and claims 10-13 dependent thereon, wherein the capillary lobe cooperatively engages a base portion of the wick holder to form a capillary gap therebetween capable of causing a capillary flow of melted fuel from the support plate to the wick. Therefore, claims 9-13, are in position for immediate allowance, notice of which is respectfully requested.

Additionally, the cited art does not disclose or suggest a candle as recited in claim 14, and claims 15-19 dependent thereon, in which the surface includes a raised capillary lobe, which cooperatively engages the wick holder to form a gap between the capillary lobe and the wick holder through which melted fuel may flow from the melting plate to the wick. Therefore, claims 14-19 are in position for immediate allowance, notice of which is respectfully requested.

The cited art also does not disclose or suggest a fuel element as recited in claim 20, and claims 21-24 dependent thereon, wherein the wick holder is configured so as to cooperatively engage a raised capillary lobe on a melting plate to form a gap between the wick holder and the capillary lobe through which melted fuel may flow by capillary action from the melting plate to the wick. Therefore, claims 20-24 are in position for immediate allowance, notice of which is respectfully requested.

Furthermore, the cited art does not disclose or suggest a wick holder as recited in claim 25, and claims 27 and 28 dependent thereon, in which a base portion of the wick holder is configured so as to cooperatively engage a raised capillary lobe upon a candle support plate in

such a manner as to permit capillary flow of melted fuel from the support plate to the wick, and wherein the wick is engaged in such a manner as to terminate a lower end of the wick at a point at least about 0.25 inches above the support plate. Therefore, claims 25, 27, and 28 are in position for allowance, notice of which is respectfully requested.

In addition, the cited art does not disclose or suggest a candle as recited in claim 40, and claims 41-51 dependent thereon, including a support plate for holding a solid fuel element and having a raised lobe protruding upwardly therefrom, wherein the solid fuel element has a wick holder and a wick, and wherein the wick holder includes a base portion that conforms to the lobe in such a manner as to form a capillary gap therebetween such that melted fuel may rise through the capillary gap from the support plate to the wick by capillary action.

Rather, Pappas discloses an anti-flash wick support for a candle. The wick support reduces the risk of flashover by maintaining a flame on a wick at least about 1/2 inch or more above the container floor and also by preventing the fuel depth from falling below about 1/2 inch above the container floor. *See* column 3, line 65 – column 4, line 19. The reason for this arrangement, as explained by the specification, is that:

[o]nce the fuel reservoir is shallower than about one-half inch, the likelihood of flashover increases. By preventing the fuel depth from falling below about one-half inch, the likelihood of flashover is significantly reduced.

Column 4, lines 15-19. In order to achieve these goals, a pedestal 40 extends upwardly from a container or lower floor 42 and has a fuel impervious upper floor 46 spaced above the lower floor about  $\frac{1}{2}$  -  $\frac{3}{4}$  inch. A wick sustainer 48 having a base and a bore supporting a wick rests upon the top surface. The wick sustainer is arranged on the pedestal specifically to prevent melted fuel from being drawn to the wick from the lower floor once a level of the fuel has dropped below the upper floor 48 in order to leave a thick reservoir of un-consumed fuel on the lower floor surrounding the pedestal. Melted fuel cannot travel from the lower floor to the wick when the fuel level is below the top surface of the pedestal. Therefore, no capillary gap is formed between the lower floor and the wick sustainer, no capillary flow is created from the lower floor to the wick, and maximum utilization of the fuel is thereby prevented.

Lee discloses a wax burner for the effective and efficient burning of normally solid wax. The wax burner has a vertical metal tube 17 with metallic heat fins 18, 19 projecting radially or laterally outwardly therefrom at a top end and at a bottom end, respectively, of the tube. The tube has a hollow core, an open top end, an open bottom end, and lateral openings 20 at the top and bottom ends. A wick W is disposed in the hollow core and extends from the bottom open end through the open top end. The wax burner is supported in a vertical position on a flat floor portion 11 of a metal can V by the lower heat fins. A bottom end of the wick is spaced *an unspecified distance* above the flat floor portion of the metal can. Wax fuel F in the container surrounds the wax burner. In operation, heat from a flame on the wick melts the wax by both radiation and conduction through the tube and heat fins. Melted wax is supplied to the flame via the wick through the lateral openings and the open bottom end of the tube. The open bottom end and the lower lateral openings allow the wax in the can to be consumed until the fuel level drops below the bottom end of the wick. Lee, however, does not disclose or suggest a specific height of the gap shown between the bottom end of the wick and the flat floor of the metal can, or that the melted wax can traverse that gap after the level of the wax has dropped below the bottom end of the wick.

Oesterle discloses a votive candle and candleholder combination designed to hold a wick in a substantially vertical position until a wax fuel is completely consumed. To accomplish this purpose, a disk 7 having an upper surface 12 sloped toward a central bore is disposed on a bottom of a cup A. A tube 9 extends upwardly from the central bore and has an open top end and lateral openings. A special votive candle has a bottom ring cavity surrounding a bottom end of a wick. An upper end of the tube fits into the bottom ring cavity with the bottom end of the wick located inside the tube. When the votive candle is nearly completely consumed, the tube holds the wick in an upright position as melted wax drains into the tube through the lateral openings.

Gross discloses a candle including a wick 12 disposed in a wax fuel charge. An exposed end 14 of the wick is centrally disposed in a recessed well or depression 18 of the wax fuel charge. Sidewalls of the recessed depression are spaced from the exposed end of the wick. The undersigned respectfully urges, however, that Gross does not disclose or suggest a raised bump

of starter fuel disposed next to the wick as suggested by in the Office action because a recessed well is not the same as a raised bump.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP § 2143.03 (*citing In re Royka*, 490 F.2d 981 (CCPA 1974)). Because none of the cited art, alone or in combination, discloses or suggests all the claim limitations of the claims at issue, or that it would be desirable or even possible to combine the elements as recited by the claims at issue, it follows that the claims are not obvious thereover. Specifically, as stated in paragraph 9 of the pending Office action with respect to original claim 25, “Pappas teaches all the limitations... *except for*... [that the invention] allows for fuel flow from the support plate by capillary action to said wick.” (Emphasis added.) Even when combined with the remaining cited art, such art does not cure this deficiency, because such a combination would be inoperative to permit capillary flow of melted fuel from the support plate to the wick. Specifically, for example, if the wick holder disclosed in Lee were placed on top of the pedestal disclosed in Pappas, there would still be no capillary fuel flow from the lower floor to the wick because there would be no capillary gap between the wick sustainer and the lower floor and no capillary path would extend between the lower floor and the wick. Rather, the fuel around the pedestal would remain un-consumed once the fuel level dropped below the level of the pedestal as described in Pappas. Further, Oesterle and Gross do not cure this deficiency either. Therefore, the proposed combinations fail to establish *prima facie* obviousness of the claimed invention at issue.

In addition, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there can be no suggestion or motivation to make the proposed modification. MPEP §2143.01 (*citing In re Gordon*, 773, F.2d 900 (Fed. Cir. 1984)). Specifically, Pappas expressly teaches away from modifying the candle disclosed in Pappas with either the disk disclosed in Oesterle or the wick holder disclosed in Lee because such combinations would cause the wick holder in Pappas to be unsatisfactory for its intended purpose. As explained in Pappas, the object of the invention is to minimize the risk of flashover by maintaining the height of the flame a minimum distance above the fuel and simultaneously preventing candle fuel from being drawn from a reservoir pool once the depth of the fuel falls

below a predetermined level. *See* column 1, lines 62-66. For that purpose, Pappas forms an impervious cover over the bottom end of the wick and/or uses the central pedestal to raise the bottom end of the wick a minimum distance above the bottom plate of the candle can to prevent fuel from being drawn from the bottom floor. However, to place the wick holder of Pappas in cooperative engagement in the central hole in the disk 7 of Oesterle would lower the height of the flame and (as taught in Pappas) would cause all or most of the fuel at the bottom of the candle to be consumed and thereby increase the risk of flashover. Further, there would be no motivation to combine Pappas and Lee because the wick holder in Lee is also designed to draw all of the fuel from the flat floor of the metal can. Such proposed modifications, even if possible, would render the invention of Pappas unsatisfactory for its intended purpose. Therefore, the proposed combination of Pappas with either Lee or Oesterle fails to establish *prima facie* obviousness of the claimed invention because the proposed modification would render the references unsatisfactory for the intended purposes thereof.

The prior art must disclose at least a suggestion of an incentive for the claimed combination of elements in order for a *prima facie* case of obviousness to be established. *See In re Sernaker*, 217, U.S.P.Q. 1 (Fed. Cir. 1983); *Ex Parte Clapp*, 227 U.S.P.Q. at 973. Because the prior art does not disclose or suggest an incentive to make the claimed combinations, it follows that the claims at issue are not obvious thereover. Therefore, the obviousness rejections of claims 3-6, 10-25, 27, and 28 as obvious over Pappas and various combinations of Lee, Gross, and Oesterle are improper and should be withdrawn, notice of which is respectfully requested.

Still further, because independent claims 1, 9, 14, 20, 25, and 40 are not disclosed or suggested by the cited references, it stands that the rejection of any claims dependent thereon are also not disclosed or suggested by the cited references.

For the foregoing reasons, reconsideration and withdrawal of the rejections of the claims at issue and issuance of a Notice of Allowance are respectfully requested.

In an attempt to facilitate early resolution of this application, the examiner is invited to call the undersigned to discuss any remaining issues.

Appl. No. 10/780,028  
Amdt. dated January 18, 2006  
Reply to O.A. of October 18, 2005

PATENT  
Docket No. J-3705

**Deposit Account Authorization**

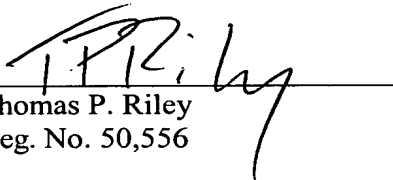
The Commissioner is hereby authorized to charge any deficiency in any amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 1.17, except issue fees, to Deposit Account No. 50-1903.

Respectfully submitted,

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Date: January 18, 2006

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